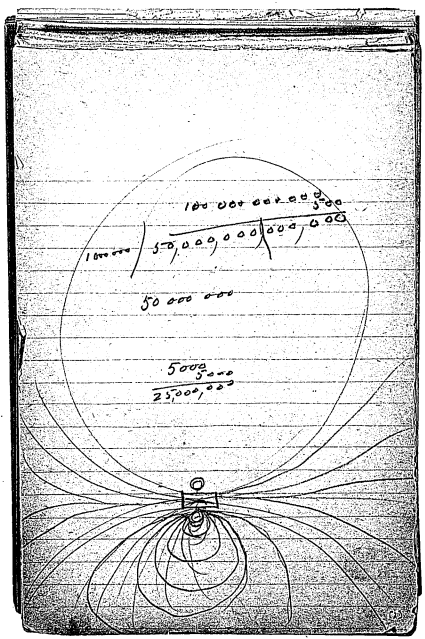
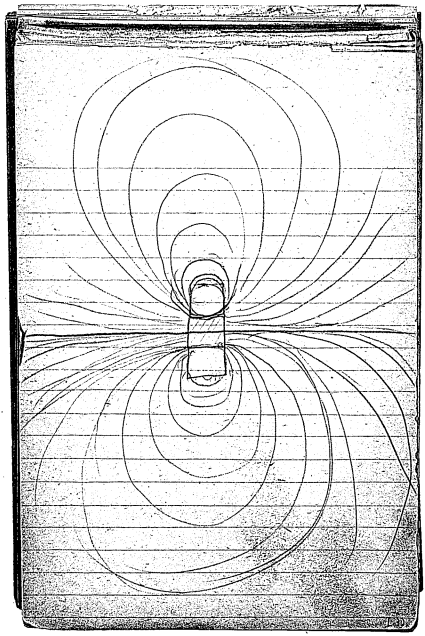
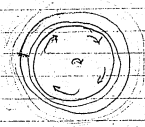
Notebook, N-99-00-00.2

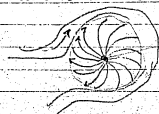
This undated non-standard-size notebook was used by Edison, possibly in 1902 or 1903. It contains notes and drawings regarding electrical theory and the reaction of metals in electrical fields. The entries may relate to Edison's experiments with x-rays, etheric force, and "xyz rays." The pages are unnumbered, and several pages have been removed from the book. Approximately 90 pages have been used.


100 000 000 000 5000
100000 | 50,000,000,000,000
50 000 000
5000 5000
25,000,000





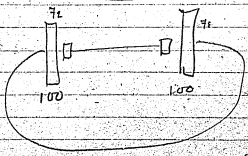
passage of Current twists the
nerve strands to twist the Exterior



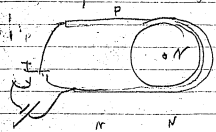
until they get to some thing
opposed the waves passage
longitudinally with the
wave

Act like a Storage battery
which is charging

Fe
Fe
Fe
Fe
NiO2
Ox Metal
Ox
Ox
Ni OH
Fe metal
Fe

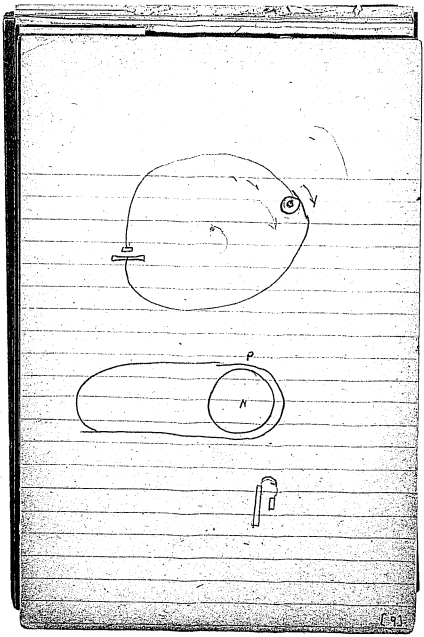

Fe
Fe
100
100

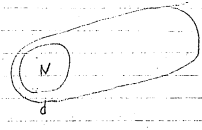
It acts like a fly wheel
with no friction but considerable inertia.



If battery, & shunt have a tendency to change + then gives off heat correspondingly to its voltage —
then when a discon it would give current in r. & heat dissipation + sends it down.

P
N


P
N


V
d

It looks as if the wire was
charged by the Iron & —
& when the Current was taken
off — it discharged thru the
Either = Iron & when Negative
Connects with the Other —
Its only one pole where we
have to do with Contacts,

There may be some other
way it can discharge +
good Currents into the
Connects, but its pretty certain
that it is charged Negative,
or Corresponds to the Zinc of
a battery
& if connected as a single battery
it acts as if it was discharged
then fully charged then reversed
~~[illegible]~~ + discharges reversed
in other words like a fly wheel
it first appears starting by inertia after
its to apply resistance [illegible]

If you put a little ~~[illegible]~~
drop in wire around it,
then when battery disconnected
it keeps on a finitely stopping its
motion from having a current in
same direction as battery current.

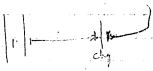
If it were compression, its
compression would act against
current & be liable to give
current in opposite direction.

If it rotates (as the machine)
clockwise a clockwise current
then would require that all
the machines of a government
magnet rotated for ever
This cant be so.

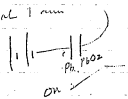
If it twisted the molecules in the direction of the Current then going back would give current in wrong direction,

If they are attracted by the Current then the Xtn Current would be OK —

If a magnet was made of Gunpowder compressed very fine — and wound with very fine wire over which was a shell of metal such thick of Copper — if Copper current broken — now changed to Aluminium + then Copper shell Cut and the discharge instead of being instantaneous without Copper shell would now take Several minutes, there would be due to Current in the Copper but the total Energy would be



1 VAL 1 mm



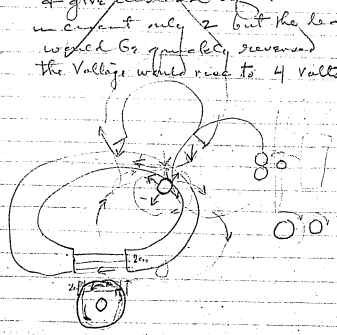
No more that depending upon the energy of the original stream, then by having Copper sheet covering the magnet entirely the magnet + coil and Earth for circuit + giving no extra Current for short periods -

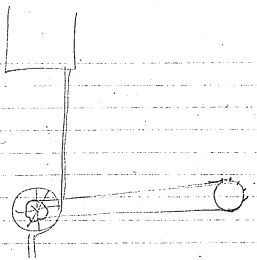
Eddy currents only delays, but does not add or change to the ~~transform~~ the energy required for each piece of fol on the iron is connected.

There must be mutual attraction but the moving Current, this would require work to be done on the magnet to oppose the Current + when Current ceased the action would be in the same direction.

~~Now also~~

If we had 2 Cells and another Cell which was a Lead Battery - ~~Cell~~ of very low capacity, & fully charged on closing the Current it would oppose the two cells & give a voltage of 4 volts in current only 2 but the lead would be quickly reversed the Voltage would rise to 4 volts.





Perhaps the molecules or Cryptogals
of iron are so arranged that
when Current passes they are
twisted ½ way round giving number
& when Current off the gas
the other part of the revolution
gives out energy in the same
direction

20000 ft 1

27/390,000/20,00 1

204 1 ft ½

1.00 .96

1".4 Mile - 1 ft -

.0001

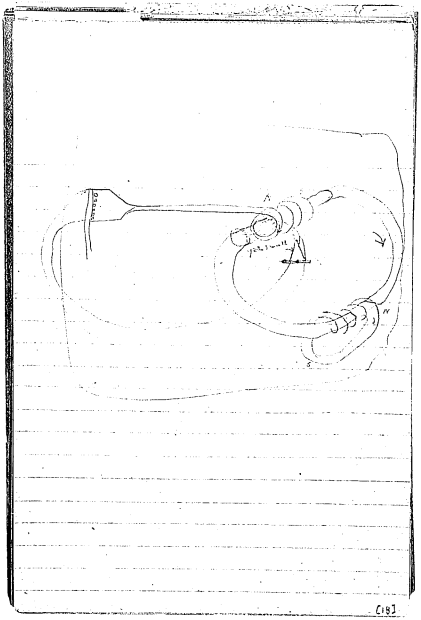
[15]

The wind gives explanation
of motion and black prevents
it. Current was some development

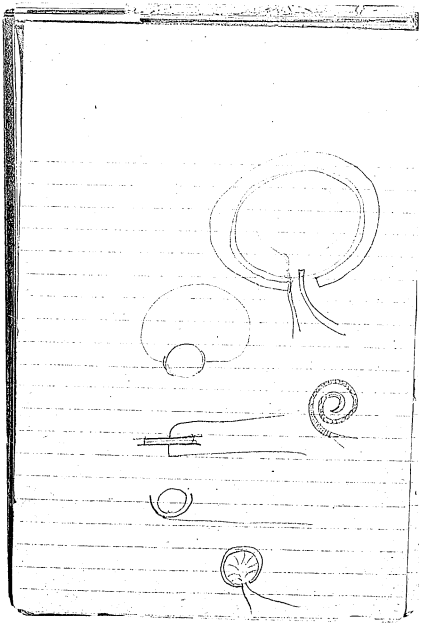
Each mall cube making a
complete rev on each
closing & opening of the
circuit, it makes a
half rev & every alternate
is running in opposite

The wm is now hanging
loz have a mag at
if a current of steel is magd
it gives 1/2 lower & can't
get back yet I don't see
how it got 1/2 rev
when closed by hand only
it cannot get back, because

Probably it required Energy
to force it around hard
against the hardness &
Rigidity Energy Energy to
get back a Knock
will sometimes do it
or it seems a strange Rule a
Knock should always
compare current theory
it looks more like crystalline
precipitation or coagulation —
not molecular —
like fluorescence or phosphorescence


A
N

Camp
Our Camp
Headwaters of the Yukon
Coalwater
Set from Water course
the line marked of
Longitude & lat. was



If the dia of Diabetes lead to increase + length demands then it will r of pend & provide to meet which dual demands & length increase —

The atomic pith is ~~oblong~~ curvation + made oblong ~~[illegible]~~ + Diabetes oblong + set the other way —

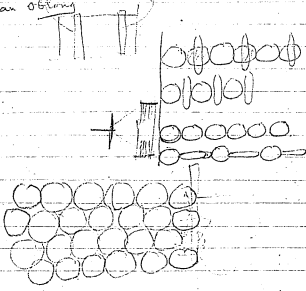
~~[illegible]~~ - Why does not set one way because composed of one kind ions + complex — Diabetes have 2 kinds ions — but how about sulphur phos, Bi —

With Iron there is hardening to form Oxygen in equilibrium with Endothermic and Exothermic

With deastetic hardening

to decomposition of oxygen by [illegible] Endothermic [illegible] further

either destroy the tangent of [illegible] movements to an oblong



Suppose we say that the aggregates of iron have their atoms orbits under elliptic and aggregates of Diamagnetism also elliptic but under very small in orbits parallel with the iron form of the orbits the opposite –

or the stress of cohesion in iron is directive, by the magnet and that Diamagnetism also but the cohesion stress takes place in an opposite direction?

Diabodies ~~[illegible]~~ ~~their shape [illegible]~~ ~~[illegible]~~ tend to form a plate or parabodies a wire –

Both are non compressible – but flow without change of their volumes –

One is a compound tendency to decompose into an element " to combine – Combine with what, with itself probably each having an orbit 2 orbits combine to make an ellipse or less n atoms

Perhaps aggregates of them are separate with equally stressed boundaries

Yet under the influence of the
waves front the stress in the 90
or additional stress is applied to
distort the crystals in instances
belonging to
In the case of the diamagnetic
the stress is unequal on the
Crystal being a uniaxial aggregate
hence the waves front makes an
tends to make it separative.

(3) The diamagnetics in magnetic
all aggregates
or they may have crystalline structure
so waves front tends to tilt them
in longest direction so as to
be parallel with waves
whereas with iron the crystal
is symmetrical & must altering

This is very likely with iron
as to some extent distortions
are compound

Now why dont copper do
the same thing –
The reason is that it dont
form a magnetic aggregate
but is like a diamagnetic
with the bar but has
no stress in the aggregate
(12) among them acted –

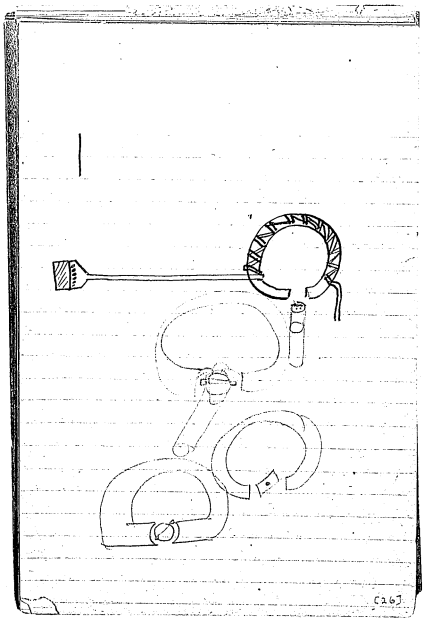
The changing of the magnetism
in a piece of mag by kindness
would show that the phenomena
is not atomic or molecular
but very much coarser – (12)
Crystalline + Cohesive forces of the
aggregated crystals, although
this wont explain a powdering
Metals or crystals gives light
better assume molecular
+ Cohesive of Molecular aggregate

Dr. Hall's Hemp tobacco, Mr. Lake's Crystals
in Cubic or symmetric Systems —

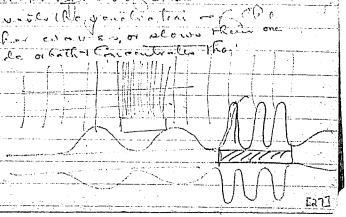
I wishing a Cube may for various
reasons go to a flat position,
also that impurities should not
have entered in the crystal and
destroy it.

When we consider how good fertilizers
have run for X ray the last
2 years, 1 year bad and may have
3 probably 5 in a period of
1 good or other years poor
of Bofcalay, Jerusalem Artichokes
3 for X — Earth Sulfides etc
for Sugar cane — Oxalic acid
for Cl Cl Cl, It not the
unprodeuts but the Crystalum
Others that does it — They grow
poor by usage

[095]


[267]

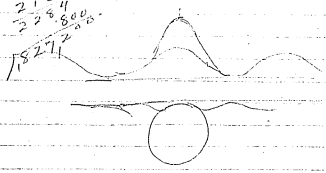
By alternating current of a ~~mag~~ general
Consider
hundred times second we may have the
Consulting Engineer of the new ~~theatre~~
then speculations that the new organs
or Cathedrals these are "Cold Comme
for such rapidly - so generally and
probably the Cathedral Pauses measures
with the alternations upto a million
or more - so that the ~~mag~~ new
Council not synchronize Congress
at once - although the alternations of
Council follows then or anyspeed
It looks ~~off~~ as if that the new
Invisible vibrations of the
Elbow exhausts or allows there one
side or both Circumstances they



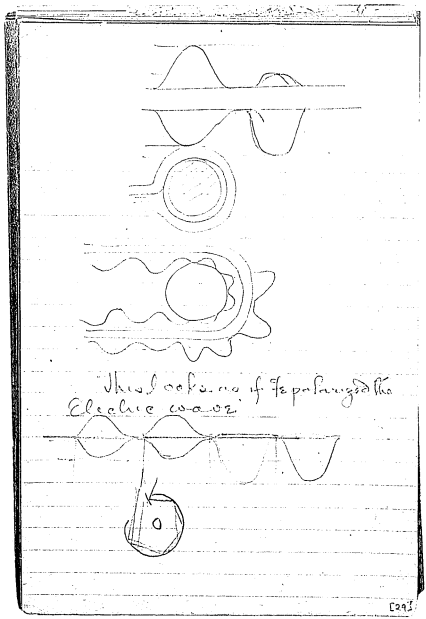
E273

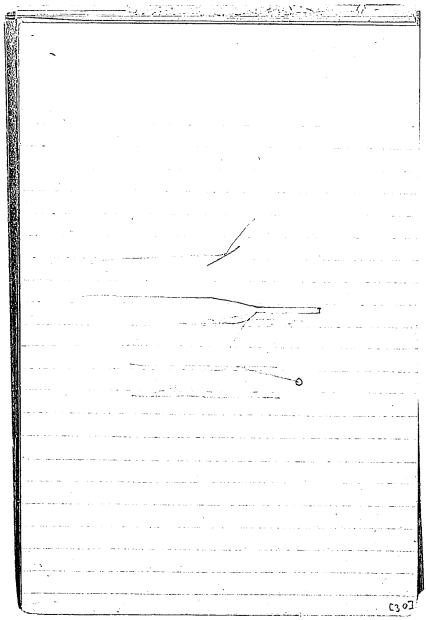
24 — for Stream flow

3
72
72
144
216
288
576
1728

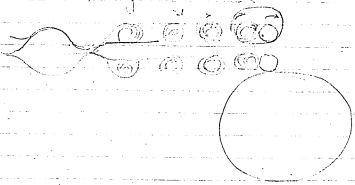


Possibly the only a surface effect the waves not being able to enter the wood & thus distort the waves. The waves come below Copper etc but are very little hence the deflection is greatly ~~which now the waves enter elsewhere~~ [illegible]


This would be as if the prolonged the
Electric wave
O
[29]



If there is a light mass blown into a vortex ring –

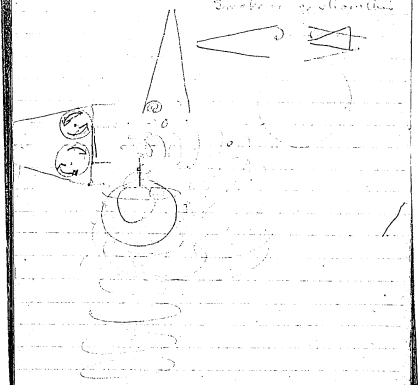


When vortices strike mass they meet resistance & contract to form larger rings – & the number of vortices per second demanded if they were originally 400 in m. they may contract to 1 in if induction circuit high enough,

or closed ring in direction mag. will start by a vortex ring stopped or still –

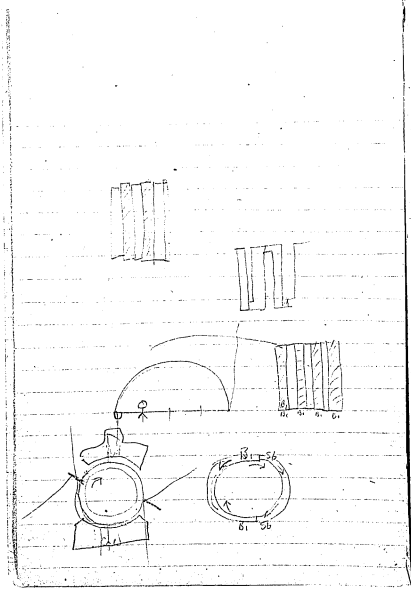
Principle of a megaphone or speaking trumpet due to Lodge, sound waves

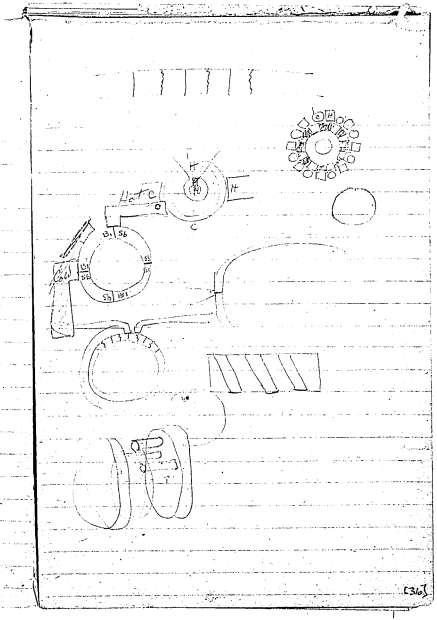
Section of a horn

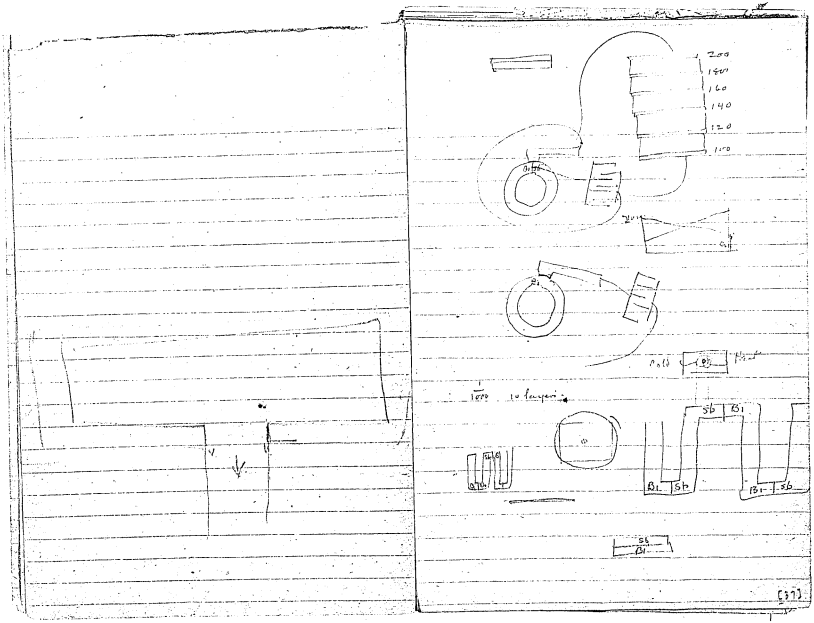


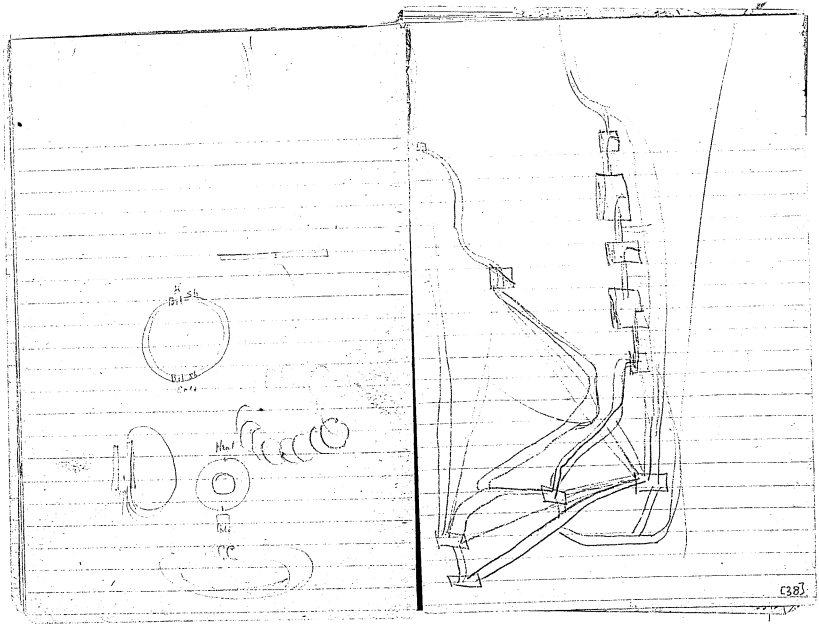
[32]

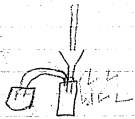
[35]

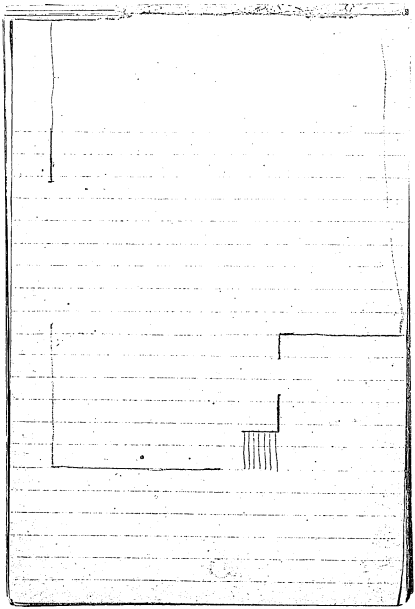




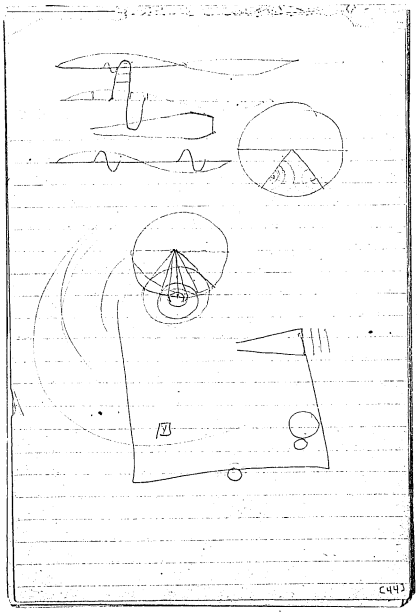

200
180
160
140
120
100
10 layers
Sb
Bi







[wa]



12.5
7.50 marlin
14.5 miles.

L. L. 60 feet, .003 thick
6
30
15
75
2 3.75
2 1.875
937

.006
.012
.024
.048 — 3/64-thick
.096
.192 — 180 thick

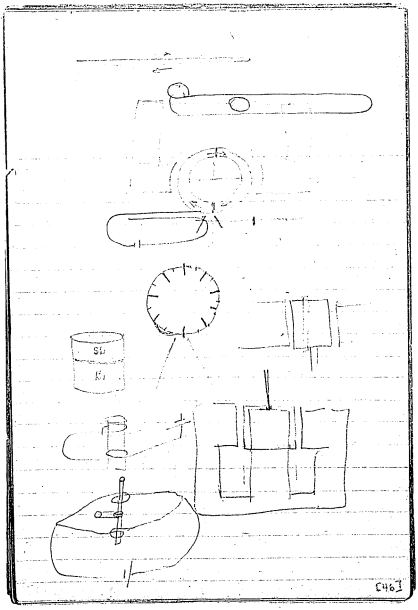
strip across dia 1/16 units .003.

62) 372 (60

3.75 leeway .060 thick

3 — 3/80 —
30/676 leeway

80-
60 leeway
3 leeway
60 leeway

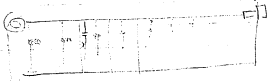


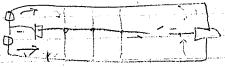
[46]

146 oz/yd²

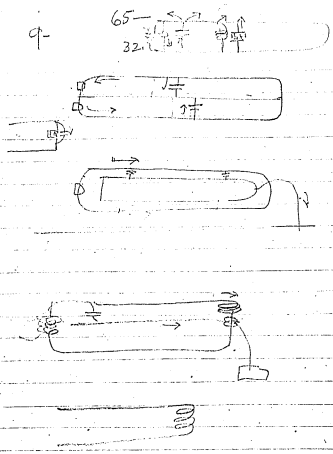
190 oz/yd²

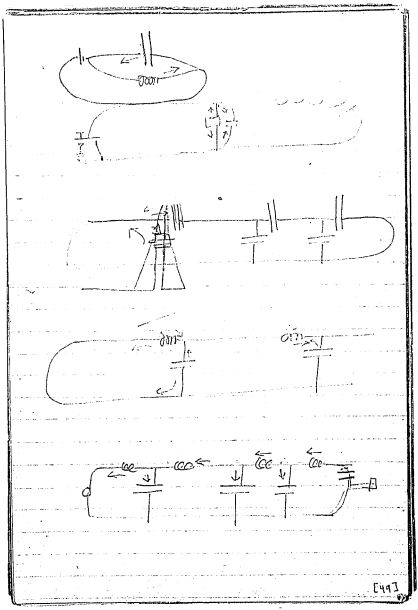
1 MIM Gee 1 Proof Comp

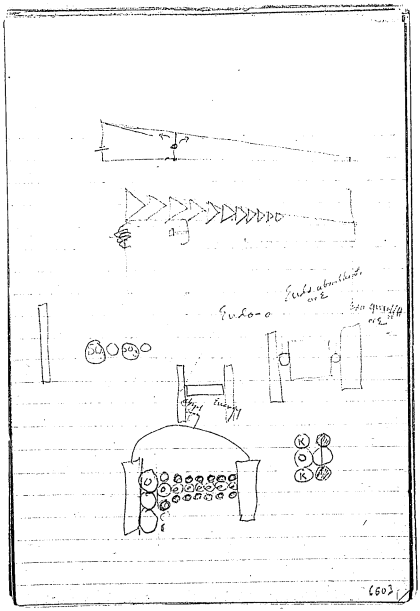


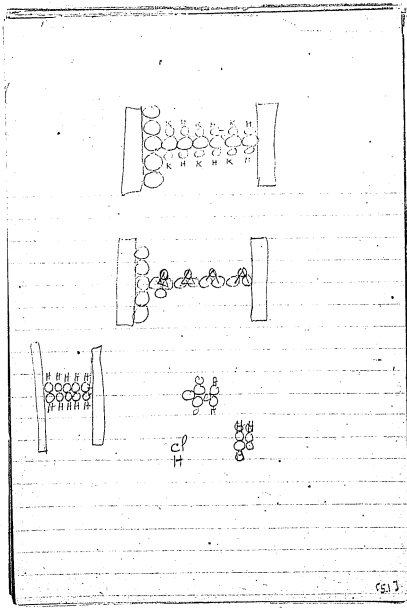


9-



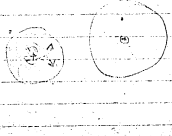



Fuhrer-o
Fuhrer-o
Fuhrer-o
K
O
K


Cl
H

clip

melting iron copper and all metals have.
Current thrown on them with Copper it
causes instantly great white heat & produces most
wonderful changes, (with iron)
known, shine (as a secondary action
~~[illegible]~~ its conducting
power for the electric current is many times better
than any Platinum wire that it had
[illegible] [illegible] or gets worse
than Copper
Evidently there is a close [illegible] gether
than all other metals or effect of
E. into throw them further apart,
They probably explain why iron
[illegible] [illegible] for other
[illegible] [illegible] of the
metals.



Action magnétique

Théorème moyen électrique

Théorème Ampère

Théorème de Gauss

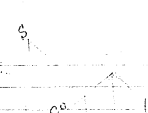
Théorème de Stokes

Théorème de Green

Théorème de Poynting

Théorème de Thévenin

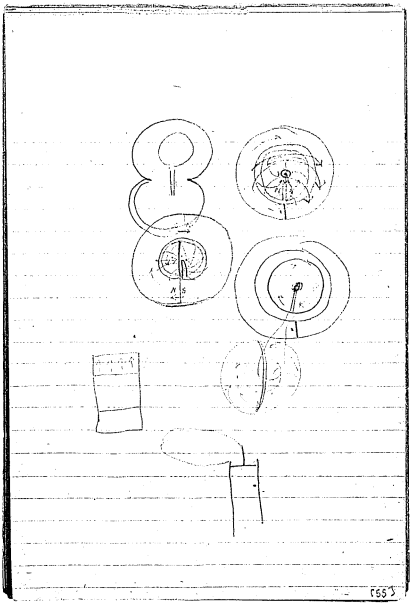
Théorème de Norton

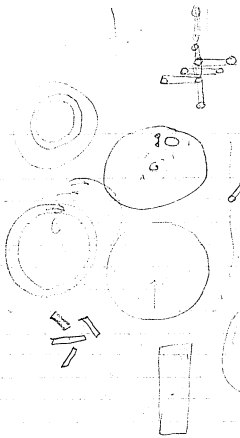


Iron and Copper have similar molecular
orbits - under influence of E shown
the orbit of Fe is nearly oblong while
Copper is almost of circular form. Still
the mean orbit is oblong at right angles to
the E waves or parallel to the wires.
Point, when E ceases the Coindence
of the Iron Molecule to come
back to Circular orbit of a given
but energy it retains. Condition
supplies it from fly to keep it in
oblong path, more oblong it is the
greater the power required.
While under E shown iron is heated
the orbit becomes circular again
at the critical point on cooling that point

Iron and Molecular Magnet

0547


N
S
E
W



The molecular air current, ~~[illegible]~~ to act
them at right angles to the Mega current.
When work is ~~[illegible]~~ Physically, no
work could be done therefore, the

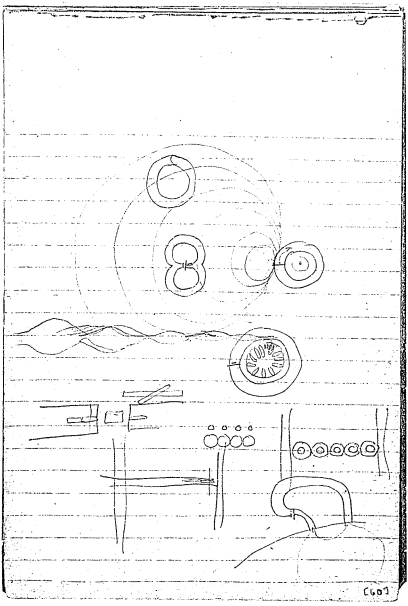
Movement
Movement of the ring must be done,
against Elastic resistance, this
Couldn't be mechanical, this would
not give a weak current, it must be
against the elasticity of the Medium.
Ether or combination of the ingre-
dients of the Ether giving varying
resistance to the Medium —
& therefore take the form of a disturbance
of the Medium of the Ether moves in
one direction than the other
or if orbital disturbance of the
orbit from circular to Elliptic,
or vice versa Yes against
Elastic elsewhere

The difference between attraction
of two Copper Coils & the same
with iron is that with Copper
we only have Yes or no current & diff. Material
& Cage of iron we have Flux
& Molecular

Iron core as always acts like
Copper but not as strong on
account of the Elec Effect
but we have a third Current
Consisting of a molecule which
has Enormously low resistance
& has that Mass & Elasticity
but Molecular Elasticity is
weak, part atomic part Ether &
now below the reachmount point
so magnetic a change in the
Molecular arrangements & forces
place at that point when the
field is strong by the ~~[illegible]~~
other Metals

[853]

27	492	82
25	521	87
23	525	87.5
21	530	88.3
19	534	89.0
17 +	541	−90.1
15	501	90
13	536	89.3


[603]

Electrolysis is probably only
a change in Ether pressure
a atom of Zinc torn off
a Combining with Hydrogen
Lets down the pressure just
the amount of Energy of pressure
it required to bring the Zinc
to metal -
Compound bodies alone
further apart than, Simple
Elements like Zinc
Therefore when Zinc goes from
a compound atom to a
Compound there must be
a release of pressure ~~with~~
Located on the universal
Ether pressure & this
pressure Equalizes itself
in the Ether & goes over a
Simple metal, It would be

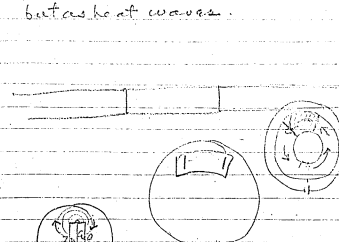
[61]

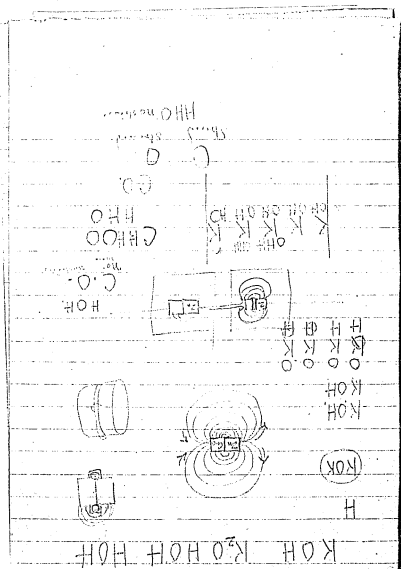
The Energy so Chemical + the Either lost no heat or light according to the residual influence Exposed to the action made of the Either — Light & heat have are Having a molecule to the ether, + Con

An Electric Current Conducted Existing Discharge on a molecule Conductor on the Ether has perfect Conductivity the molecule of the Energy expended ~~[illegible]~~ Be also applied Then the Ether + light would be given off - at the matter giving Energy + no Effect as we Know it =

In a battery E is also combustion action, its temp being depending on the resistance of the circuit to Discharge the electricity Enhanced -

This shows all the come can't get into the Ether outside of the vacuum on account of Matter which is Elastic but it can go on the Ether in the corner of metals are not elastic, but it goes into the Ether not as the waves but as he at waves.





To here our education the necessary to have a mobile Liquid the atoms of which are Zero stressed and Two other atoms, which are to be combined to furnish Energy which are stressed & high gradient —

Two stressed atoms Elements can Cause of combine without the intervention of neutral stressed atoms.

Dry Combustibles do not Combine Except in the presence of Water or with aid of Electric pressure! —

Thus case with dry Carbon & Dry Oxygen — Now if we put O + Zero in water there is no Combination when the Current

How does this bring about Conduction

The water in the ~~act~~ of combining changes the Condition so the power conduction

What change does it make

HCl gas has a great affinity for water.

But KCl hasn't much affinity for water

Calculation shows probably this is about as good as HCl

Because of the great affinity of water for HCl and KCl

Reassume the grouping of the atoms in the molecule

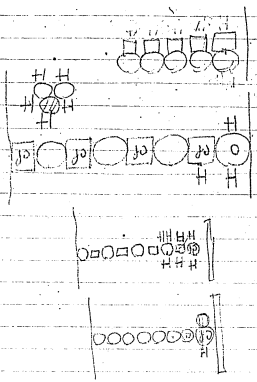
as changed + a molecule has the H+K enclosed + the radicals

Lately examined & found the Hydrogen on the Compound & made the Acids & Acids

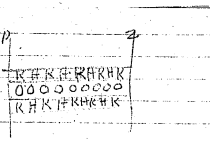
Electrolysis of the 2 Separate ions

Lately discovered a process for Hydrogen

[993]

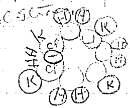


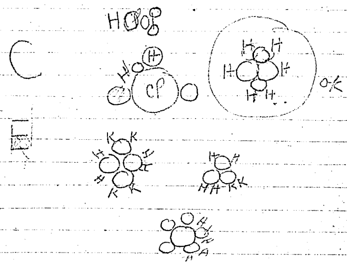
Hof Kcc.

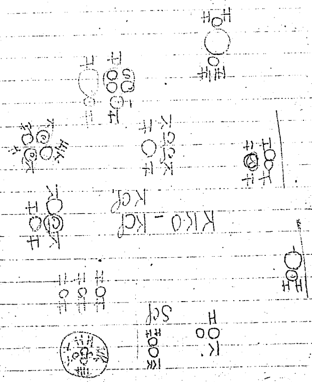


and when the circuit is closed they set themselves at right angles to the Current like a Magnetic Male and Female ~~[illegible]~~ Electrons, where was vortex created so to speak the O ~~[illegible]~~ ~~[illegible]~~ ~~[illegible]~~ P of the N to N ~~[illegible]~~ ~~[illegible]~~ takes place ~~[illegible]~~ tube,

It is impossible for the part which has zero other atoms to dissolve in water + be decomposed to acquire potential [illegible]

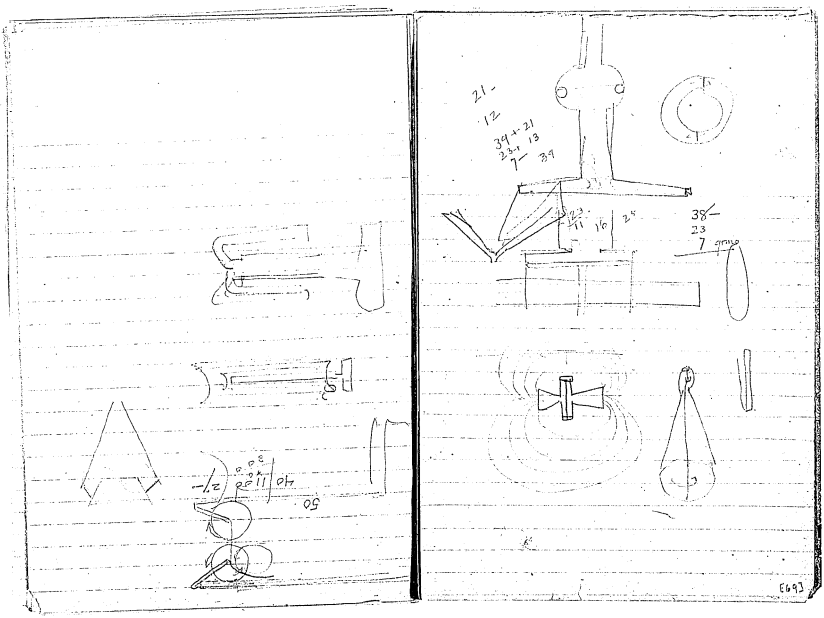






.24

5


21
12
39+21
24 13
7 39
38
23
7
16
24
50
40
11
27
E693

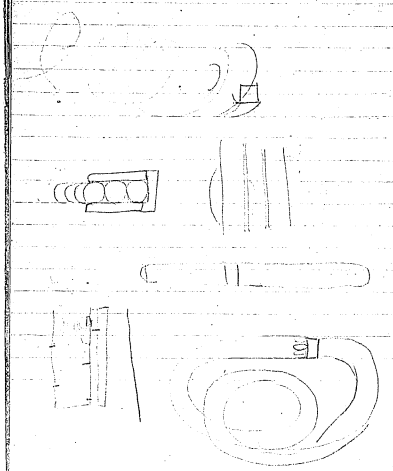
11 grms NaOH
3 Lithia –

16
78 grms

8 | 250 | 30°
24

Nickel makes no contact with
Electrolite in Mf & S Storage
battery, the only the same the
Oxygen What does this
Dignify –
in fine weather, the Energy of the
new compound decomposes against
Energy of H_2O, — if something
put in Water which dissolves
(Energy given out when formed
than $O_2 + H_2$ it should explode
but, K_2O has power of combining
with Water, thereby the resultant heat is
due to the [illegible] of [illegible]

(703)



between the H_2O & the other.
in other words a very loose
combination of H_2O with X
in which the lowest valence will
decompose, in the presence of H_2O.
or, the metal & O will end at Epsilon.

H_2O is the radicle of KCl.
Solubility, is common these substances
which give off in act from your
Combining time cost hydrates,

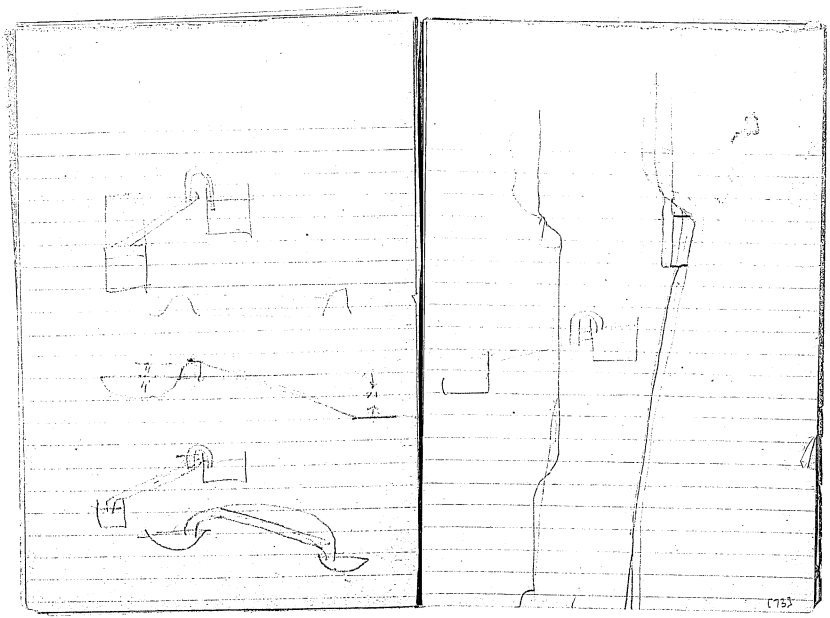
$KCl \cdot HAO$ KI $HO\,HO$

$KH_2 \cdot H$

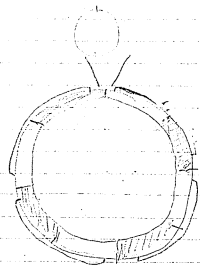
both

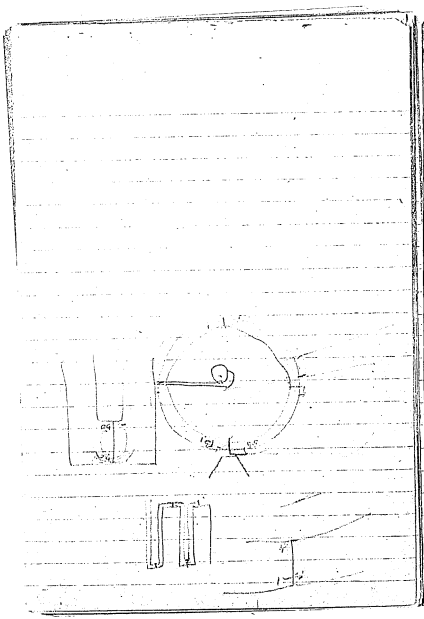
K_2SO_4 H_2O

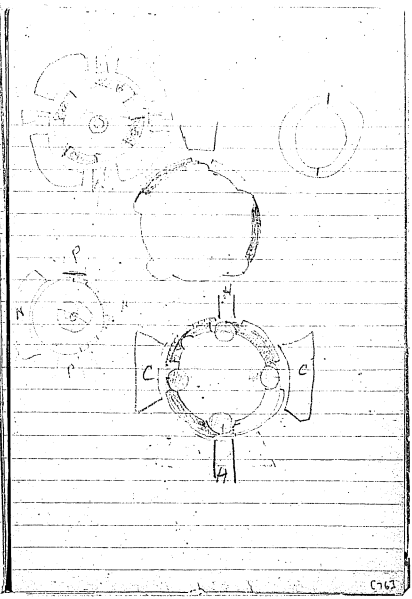
25
31250
125
2000
17500
93750
2000
2000
212 to 90
122 to 122
212 to 122

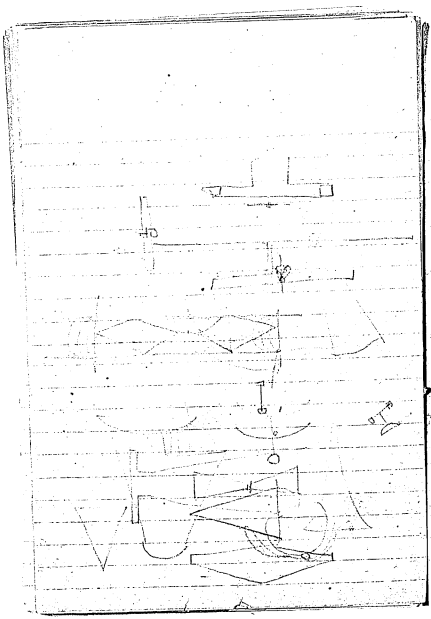


20
30
60
30
60
20





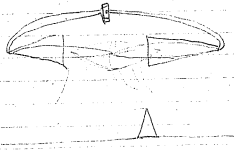
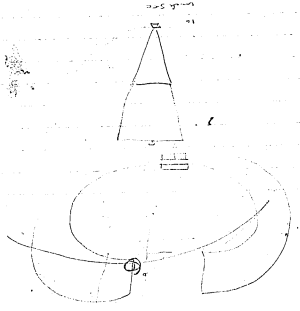
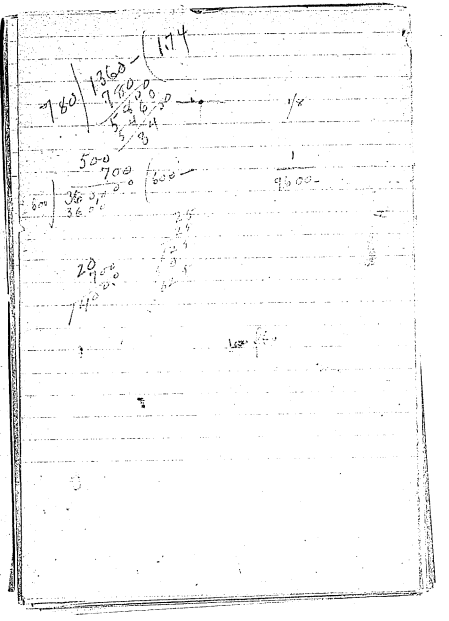

P
P
C
C



Short Cir. [illegible] Short-9 [illegible] 1 [illegible] left by
9 ohms. Bob 299 [illegible] Commutated,
[illegible] ohm. 1203 ohms.
[illegible] .77 ohm. $\frac{1}{1000}$ inch wide $\frac{1}{1000}$ [illegible]
10" wide .0001 ohm.

.0001 ohm - $\frac{1}{10}$ of volt.

1 Volt / 400 = 2500 amp
2500 × 10 = 25000

25 watts,

[18]